



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

December 21, 2003

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Brandenburg Industrial Service Company / 089-16450-00176

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 9/16/03



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph A. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

December 31, 2003

Mr. Tom Delaney
INDIV Safety and Environmental Manager
Brandenburg Industrial Service Company
One North Broadway TS 670
Gary, Indiana 46402

Re: Significant Source Modification No:
089-16450-00176

Dear Mr. Delaney:

Brandenburg Industrial Service Company applied for a Part 70 operating permit on December 13, 1996 for a scrap steel processing operation. An application to modify the source was received on November 13, 2002. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction and operation at the source:

- (a) One (1) paint booth (identified as Unit 002) used for coating metal trailers and lunch boxes, using airless spray guns to apply primer and air atomization spray guns to apply finish coats, with a maximum paint usage of 3.63 gallons of primer per hour and 1.4 gallons of finish coat per hour. Emissions of particulate are controlled using dry filters, which exhaust to stacks PBES-01 and PBES-02. The paint booth was constructed in 2002.
- (b) One (1) enclosed blast booth (identified as Unit 003), equipped with two (2) blast guns each having a maximum capacity of 240 square feet of metal per hour and 105.4 pounds of steel grit per minute per nozzle. Particulate emissions are controlled by a dust collector, which exhausts inside the building. The blast booth was constructed in 2002.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Amanda Baynham, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7910 to speak directly to Ms. Baynham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/AAB

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Ramesh Tejuja
Compliance Data Section - Karen Nowak
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Brandenburg Industrial Service Company
- A Contractor for U.S. Steel - Gary Works
One North Broadway TS 670
Gary, Indiana, 46402**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Significant Source Modification No.: 089-16450-00176	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 31, 2003



TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]
- A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]
- A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]
- A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

SECTION B GENERAL CONSTRUCTION CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Effective Date of the Permit [IC13-15-5-3]
- B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]
- B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

SECTION C GENERAL OPERATION CONDITIONS

- C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]
- C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
- C.4 Opacity [326 IAC 5-1]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Fugitive Dust Emissions [326 IAC 6-1-11.1]
- C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
- C.8 Operation of Equipment [326 IAC 2-7-6(6)]
- C.9 Stack Height [326 IAC 1-7]

Testing Requirements [326 IAC 2-7-6(1)]

- C.10 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

Compliance Requirements [326 IAC 2-1.1-11]

- C.11 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.14 Emergency Provisions [326 IAC 2-7-16]
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]
- C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

SECTION D.1 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 PSD Minor and Emission Offset Minor Limits [326 IAC 2-2] [326 IAC 2-3]
- D.1.2 Particulate [326 IAC 6-3-2]

TABLE OF CONTENTS (Continued)

D.1.3 Fugitive Particulate Matter (PM) [326 IAC 6-1-11.1]

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.1.5 PM and PM10 Control

D.1.6 Particulate Matter (PM) [326 IAC 6-1-11.1]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.7 Visible Emissions Notations

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements

D.1.9 Reporting Requirements [326 IAC 6-1-11.1]

Certification

Quarterly Report

Emergency Occurrence Report

SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information contained in conditions A.1, A.3 and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a scrap steel processing operation.

Responsible Official:	President
Initial Source Address:	One North Broadway TS 670, Gary, Indiana 46402
Source Mailing Address:	One North Broadway TS 670, Gary, Indiana 46402
General Source Phone Number:	(219) 881-0200
SIC Code:	1795 and 5093
County Location:	Lake
Source Location Status:	Nonattainment for PM ₁₀ , SO ₂ , and ozone Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules; Major Source, Section 112 of the Clean Air Act In 1 of 28 Source Categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This scrap steel processing operation is an on-site contractor :

- (a) US Steel, Gary Works, 089-00121, the primary operation, is located at One North Broadway, Gary, IN 46402; and
- (b) Brandenburg Industrial Service Company, 089-00176, the supporting operation, is located at One North Broadway, Stop 670, Gary, IN 46402

IDEM has determined that US Steel, Gary Works and Brandenburg Industrial Service Company, are under the common control of US Steel, Gary Works. These two plants are considered one source due to contractual control. Therefore, the term "source" in this permit refers to both US Steel -Gary Works and Brandenburg Industrial Service.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) One (1) paint booth (identified as Unit 002) used for coating metal trailers and lunch boxes, using airless spray guns to apply primer and air atomization spray guns to apply finish coats, with a maximum paint usage of 3.63 gallons of primer per hour and 1.4 gallons of finish coat per hour. Emissions of particulate are controlled using dry filters, which exhaust to stacks PBES-01 and PBES-02. The paint booth was constructed in 2002.
- (b) One (1) enclosed blast booth (identified as Unit 003), equipped with two (2) blast guns each having a maximum capacity of 240 square feet of metal per hour and 105.4 pounds of

steel grit per minute per nozzle. Particulate emissions are controlled by a dust collector, which exhausts inside the building. The blast booth was constructed in 2002.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This modification to this stationary source does not include any insignificant activities, as defined in 326 IAC 2-7-1(21).

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [326 IAC 13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
 - (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is

issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Dust Emissions [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted on December 13, 1996.

C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on December 13, 1996.

C.8 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.9 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements [326 IAC 2-7-6(1)]

C.10 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40

CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ or regional office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

Northwest Regional Office
Telephone Number: 1-888-209-8892, or
Telephone Number: (219) 881-6712
Facsimile Number: (219) 881-6745

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

**C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this Permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) paint booth (identified as Unit 002) used for coating metal trailers and lunch boxes, using airless spray guns to apply primer and air atomization spray guns to apply finish coats, with a maximum paint usage of 3.63 gallons of primer per hour and 1.4 gallons of finish coat per hour. Emissions of particulate are controlled using dry filters, which exhaust to stacks PBES-01 and PBES-02. The paint booth was constructed in 2002.
- (b) One (1) enclosed blast booth (identified as Unit 003), equipped with two (2) blast guns each having a maximum capacity of 240 square feet of metal per hour and 105.4 pounds of steel grit per minute per nozzle. Particulate emissions are controlled by a dust collector, which exhausts inside the building. The blast booth was constructed in 2002.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Emission Offset and PSD Limitations [326 IAC 2-3][326 IAC 2-2]

- (a) The amount of VOC used in the Paint Booth (identified as Unit 002) shall not exceed 0.5 tons per year, with compliance determined at the end of each month.
- (b) The PM and PM₁₀ emissions shall be limited as follows:
 - (1) The PM and PM₁₀ emissions from the Paint Booth (identified as Unit 002) shall not exceed 0.21 pounds per hour. This limit is equivalent to 0.92 tons per year.
 - (2) The PM and PM₁₀ emissions from the Blast Booth (identified as Unit 003) shall not exceed 0.13 pounds per hour, which is equivalent to 0.57 tons per year.

Compliance with conditions (a) and (b) makes 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to this modification.

D.1.2 Particulate Emissions [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Emission Limitations for General Sources), the particulate matter emissions from the Paint Booth (identified as Unit 002) and Blast Booth (identified as Unit 003) shall not exceed 0.03 grains per dry standard cubic foot.

D.1.3 Miscellaneous Metal Coating [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-1(a)(4), the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) are not applicable to the Paint Booth (identified as Unit 002). If at any time the amount of VOC used in the Paint Booth exceeds fifteen (15) pounds per day, the Permittee shall notify the IDEM, OAQ of the change in operation and shall comply with the requirements of 326 IAC 8-2-9.

Compliance Determination Requirements

D.1.4 Particulate Control

- (a) In order to comply with Conditions D.1.1(b)(1) and D.1.2, the dry filters used to control particulate emissions shall be in operation and control emissions from the Paint Booth at all times the Paint Booth is in operation.

- (b) In order to comply with Conditions D.1.1(b)(2) and D.1.2, the dust collectors used to control particulate emissions shall be in operation and control emissions from the Blast Booth at all times the Blast Booth is in operation.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.5 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1(a) and D.1.3, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits established in Condition D.1.1(a) and D.1.3. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) The VOC content of each coating material and solvent used.
 - (2) The amount of coating material and solvent used on daily basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (3) The total VOC usage for each day; and
 - (4) The weight of VOCs emitted each month.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Brandenburg Industrial Service Company
- A Contractor for U.S. Steel - Gary Works
Source Address: One North Broadway TS 670, Gary Indiana 46402
Mailing Address: One North Broadway TS 670, Gary Indiana 46402
Source Modification No.: 089-16450-00176

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- ? Test Result (specify) _____
- ? Report (specify) _____
- ? Notification (specify) _____
- ? Affidavit (specify) _____
- ? Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Source Modification Quarterly Report

Source Name: Brandenburg Industrial Service Company
- A Contractor for U.S. Steel - Gary Works
Source Address: One North Broadway TS 670, Gary Indiana 46402
Mailing Address: One North Broadway TS 670, Gary Indiana 46402
Source Modification No.: 089-16450-00176
Facility: Paint Booth (Unit 002)
Parameter: Volatile Organic Compounds (VOC)
Limit: 0.5 Tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

? No deviation occurred in this quarter.

? Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Brandenburg Industrial Service Company
- A Contractor for U.S. Steel - Gary Works
Source Address: One North Broadway TS 670, Gary Indiana 46402
Mailing Address: One North Broadway TS 670, Gary Indiana 46402
Source Modification No.: 089-16450-00176

This form consists of 2 pages

Page 1 of 2

- ? This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:

Date/Time Emergency was corrected:

Was the facility being properly operated at the time of the emergency? Y N
Describe:

Type of Pollutants Emitted: TSP, PM-10, SO₂, VOC, NO_x, CO, Pb, other:

Estimated amount of pollutant(s) emitted during emergency:

Describe the steps taken to mitigate the problem:

Describe the corrective actions/response steps taken:

Describe the measures taken to minimize emissions:

If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	Brandenburg Industrial Service Company
Source Location:	One North Broadway TS 670, Gary, Indiana 46402
County:	Lake
SIC Code:	1795 and 5093
Operation Permit No.:	089-6581-00176
Operation Permit Issuance Date:	Pending
Significant Source Modification No.:	089-16450-00176
Permit Reviewer:	ERG/AAB

On October 24, 2003, the Office of Air Quality (OAQ) had a notice published in The Times and Post Tribune, Merrillville, Indiana, stating that Brandenburg Industrial Service Company had applied for a Part 70 Significant Source Modification to operate a new spray booth and shotblast facility equipped with dry filters and a baghouse. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. The citation 326 IAC 2-7-1-(22) listed in the Table of Contents for Condition A.1 has been corrected to read 326 IAC 2-7-1(22). The citation in the title of Condition A.1 of the draft permit was correct and no changes have been made to this condition.
2. The header on page 2 and all subsequent pages of the permit state that the company name is Brandenburg Industrial Services Company. The correct name for the company is Brandenburg Industrial Service Company as stated on the front cover of the permit. The header has been corrected to reflect the correct company name. A similar error was also made on the attached forms, which have also been corrected.
3. On page 10 of the draft permit placed on public notice, the title for the opacity condition was accidentally deleted from the draft permit and parts (a) and (b) were incorrectly numbered as (e) and (f), respectively. The condition title has been added to the permit and the opacity condition has been numbered as Condition C.4. All subsequent conditions were renumbered. The corrections to the opacity condition are shown below. The title of this condition has also been added to the Table of Contents.

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- ~~(e)~~(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - ~~(f)~~(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
4. A new testing condition has been added to the permit to clarify the general requirements for stack testing should stack testing be required. No stack tests are required for the emission units contained in this permit; therefore, this information is provided only for advisory purposes.

Testing Requirements [326 IAC 2-7-6(1)]

C.10 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

5. The following typographical error in Condition D.1.5 has been corrected:

D.1.5 Record Keeping Requirements

-
- (a) To document compliance with Condition D.1.1(a) and D.1.3, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits established in Condition D.1.1(a) and D.1.3. Records necessary to demonstrate compliance shall be available within 30 days ~~if~~ **of** the end of each compliance period.
6. The Emergency Occurrence Report referenced in Condition C.12(b)(5) was inadvertently omitted from the draft permit. A copy of this form has been added to the permit, as shown on the attached pages:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Brandenburg Industrial Service Company
- A Contractor for U.S. Steel - Gary Works
Source Address: One North Broadway TS 670, Gary Indiana 46402
Mailing Address: One North Broadway TS 670, Gary Indiana 46402
Source Modification No.: 089-16450-00176

This form consists of 2 pages

Page 1 of 2

- ? This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

7. Since this source is not a portable source, Condition A.1 in the draft permit, which included "Initial County Location" as one of the categories, should have instead stated "County Location." This has been corrected.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a scrap steel processing operation.

Responsible Official:	President
Initial Source Address:	One North Broadway TS 670, Gary, Indiana 46402
Source Mailing Address:	One North Broadway TS 670, Gary, Indiana 46402
General Source Phone Number:	(219) 881-0200
SIC Code:	1795 and 5093
Initial County Location:	Lake
Source Location Status:	Nonattainment for PM ₁₀ , SO ₂ , and ozone Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules; Major Source, Section 112 of the Clean Air Act In 1 of 28 Source Categories

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Background and Description

Source Name:	Brandenburg Industrial Service Company - A contractor of U.S. Steel - Gary Works
Initial Source Location:	One North Broadway TS 670, Gary, Indiana 46402
County:	Lake
SIC Code:	5093/1795
Operation Permit No.:	T089-8013-00176
Operation Permit Issuance Date:	Not Yet Issued
Significant Source Modification No.:	089-16450-00176
Permit Reviewer:	ERG/AAB

The Office of Air Quality (OAQ) has reviewed a modification application from Brandenburg Industrial Service Company relating to the operation of the following emission units and pollution control devices:

- (a) One (1) paint booth (identified as Unit 002) used for coating metal trailers and lunch boxes, using airless spray guns to apply primer and air atomization spray guns to apply finish coats, with a maximum paint usage of 3.63 gallons of primer per hour and 1.4 gallons of finish coat per hour. Emissions of particulate are controlled using dry filters, which exhaust to stacks PBES-01 and PBES-02. The paint booth was constructed in 2002.
- (b) One (1) enclosed blast booth (identified as Unit 003), equipped with two (2) blast guns each having a maximum capacity of 240 square feet of metal per hour and 105.4 pounds of steel grit per minute per nozzle. Particulate emissions are controlled by a dust collector, which exhausts inside the building. The blast booth was constructed in 2002.

History

On November 13, 2002, Brandenburg Industrial Service Company (Brandenburg) submitted an application to IDEM, OAQ requesting permission to add a new paint booth and blast booth to their existing plant located at the US Steel - Gary Works. Construction on the new units began in April 2002 and began operating on October 14, 2002. The new units replace existing paint and blasting operations and do not increase the maximum production capacity of the plant.

The source submitted a Part 70 permit application on December 13, 1996 with additional information submitted in July 2001. The draft Part 70 permit is currently being prepared.

Source Definition

This scrap processing operation is an on-site contractor for US Steel - Gary Works.

- (a) US Steel - Gary Works, the primary operation, is located at One North Broadway, Gary, Indiana 46402; and
- (b) Brandenburg Industrial Services Company, the supporting operation, is located at One North Broadway, TS-670, Gary, Indiana 46402.

IDEM, OAQ has determined that US Steel - Gary Works and the Brandenburg facility located at the US Steel plant are under the common control of US Steel. These two plants are considered one source due to the contractual agreement between the two companies. Therefore, the term "source" in the Part 70 documents refers to both the Brandenburg facility and the US Steel - Gary Works as one source.

Separate Part 70 permits have been prepared for US Steel and Brandenburg solely for administrative purposes. However, the draft permits have not yet been issued.

Enforcement Issue

- (a) IDEM is aware that the paint booth and blast booth were constructed and operated prior to receipt of the proper permit.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
PBES-01	Paint Booth	45' 7"	34"	15,000	Ambient
PBES-02		45' 7"	34"	15,000	Ambient

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 13, 2002. Additional information was received on July 18, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 3).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted,

stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	143
PM-10	143
SO ₂	0.0
VOC	75.3
CO	0.0
NO _x	0.0

HAPs	Potential To Emit (tons/year)
Xylene	6.43
Toluene	1.46
Methyl Ethyl Ketone	1.11
Ethyl Benzene	1.35
1,2,4 - Trimethyl Benzene	0.29
Aliphatic Disocyanate	0.03
Total	10.7

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5 (f)(4) because the modification has a potential to emit greater than 25 tons per year of VOC, PM, and PM10.

County Attainment Status

The source is initially located in Lake County.

Pollutant	Status
PM-10	Moderate Nonattainment*
SO ₂	Primary Nonattainment
NO ₂	Attainment
Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment

*Lake County has been federally redesignated in 40 CFR 81.135 as attainment for PM10. The Air Pollution Control Board will be making the same redesignation in state rules.

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

- (b) A portion of Lake County has been classified as nonattainment for particulate matter with aerodynamic diameter less than or equal to 10 micrometers (PM₁₀) and sulfur dioxide (SO₂). This source is located at the U.S. Steel plant in East Chicago, which is in the PM₁₀ and SO₂ nonattainment portions of Lake County. Therefore, PM₁₀ and SO₂ were reviewed pursuant to the requirements of 326 IAC 2-3 (Emission Offset).
- (c) Lake County has been classified as attainment for the remaining criteria pollutants. Therefore, emissions from the remaining criteria pollutants were reviewed pursuant to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).
- (d) Fugitive Emissions
 Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, the fugitive PM emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD and Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	Greater than 100
PM-10	Greater than 100
SO ₂	Greater than 100
VOC	Greater than 25
CO	Greater than 100
NO _x	Greater than 100

- (a) This existing source (U.S. Steel) is a major stationary source under PSD (326 IAC 2-2) because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is in one of the 28 listed source categories. This source is also a major stationary source under Emission Offset (326 IAC 2-3), because emissions of VOC, PM₁₀, and SO₂ are emitted at rates greater than the emission offset thresholds.
- (b) These emissions are based upon construction permit 089-12137-00121, issued on October 16, 2000.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)					
Pollutant	PM	PM-10	SO ₂	VOC	CO	NO _x
Future Potential	1.5	1.5	0	0.5	0	0
Past Actual	0.02	0.02	0	0.38	0	0

Net Emissions from Project	1.48	1.48	0	0.12	0	0
PSD/Emission Offset Thresholds	25	15	25	25*	100	40

* De Minimis Threshold.

This modification to an existing major stationary source is not major because the net emission increase of PM, PM₁₀, SO₂, CO and NO_x are less than the Emission Offset and Prevention of Significant Deterioration (PSD) significant levels.

This modification will result in a net increase in VOC emissions of 0.12 tons per year. Therefore, VOC emissions from modifications at U.S. Steel - Gary Works during the five-year period prior to and including this modification were evaluated to determine whether the VOC emissions increase was greater than the de minimis level of 25 tons per year. The following table shows VOC increases over the five year period immediately preceeding this modification:

Project	VOC (tons/year)
Plate Heat Treat Furnace	0.42
Batch Anneal Furnaces	0.05
Levy Modifications	0.17
RTO Sludge Dryers	0.02
Modified Oil Reclamation Plant	0.17
U.S. Aggregates Slag Processing Facility	0.01
Boiler No. 4A	0.36
Tar Centrifuge Plant	7.03
Sinter Plant Burners/Coke Oven Battery Injection Jets	0.75
EGL Boiler Modifications	0.54
Total Emission Increases	9.52

The VOC emissions increases over the previous five years plus the emission increase from the current modification results in an emission increase of 9.64 tons per year. Since the VOC emission increase is less than the de minimis, this modification is not subject to 326 IAC 2-3 (Emission Offset).

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this modification.
- (c) This significant modification does not involve a pollutant-specific emissions unit::

- (1) With the potential to emit before controls equal to or greater than one hundred (100) tons per year, and
- (2) That is subject to an emission limit and has a control device that is necessary to meet that limit.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable.

State Rule Applicability - Entire Source

326 IAC 5-1-2 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-3 (Emission Offset)

The Brandenburg facility is located at the U.S. Steel - Gary Works in Gary, Indiana, which is in nonattainment for the PM₁₀, ozone, and sulfur dioxide. Since the surface coating booth and blast booth emit PM₁₀ and VOC (a precursor for ozone), this modification was reviewed pursuant to the requirements of 326 IAC 2-3 (Emission Offset).

Any modification that increases the potential PM₁₀ emissions above 25 tons per year and 15 tons per year, respectively is subject to the requirements of 326 IAC 2-3. Although the combined potential to emit PM₁₀ from the paint and blast booths are greater than the Emission Offset thresholds, the source has agreed to limit the emissions from these operations to 1.5 tons per year by complying with the following limitations:

- (a) The PM₁₀ emissions from the Paint Booth (identified as Unit 002) shall not exceed 0.21 pounds per hour. This limit is equivalent to 0.92 tons per year.
- (b) The PM₁₀ emissions from the Blast Booth (identified as Unit 003) shall not exceed 0.13 pounds per hour. This limit is equivalent to 0.57 tons per year.

The source will comply with these limitations using dry filters on the paint booth and dust collectors on the blast booth.

Since Lake County is a severe nonattainment area for ozone, any modification that would increase the VOC emissions by an amount greater than the de minimis (25 tons per year), when the net emissions increase from the modification is aggregated with the emissions increases from the source over a five (5) consecutive month period prior to and including the year of modification (see table in section titled "Potential to Emit of This Modification After Issuance" for additional detail). Although the potential emissions of VOC from the new paint booth are over 70 tons per year, Brandenburg has agreed to limit the emissions from the paint booth to less than 0.5 tons per year. Since the new paint booth replaced the existing surface coating facility, the increase in potential emissions from this modification is 0.5 tons per year minus the emissions of 0.38 tons per year,

which is an increase of 0.12 tons per year. The contemporaneous decrease comes from the decommissioning of the previous surface coating facility. The 0.12 tons per year contemporaneous decrease in VOC combined with the emission increases for modifications performed over the previous five years equals 9.64 tons per year, which is less than the 25 ton per year de minimus threshold. Therefore, the provisions of 326 IAC 2-3 do not apply to this modification. The following requirement has been added to the permit:

The amount of VOC used in the Paint Booth (identified as Unit 002) shall not exceed 0.5 tons per year, with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) not applicable.

To demonstrate compliance with this limitation, Brandenburg will maintain records of the amount of VOC used in the paint booth.

326 IAC 2-2 (Prevention of Significant Deterioration)

Since the Brandenburg facility is located at the U.S. Steel - Gary Works, the PM emissions from this modification was reviewed pursuant to the requirements for major sources under the Prevention of Significant Deterioration (PSD) regulations. Although the potential emissions of particulate matter from the paint booth and blast booth are greater than the PSD 25 tons per year threshold, Brandenburg has agreed to limit the emissions from this modification to less than the PSD threshold. Note that the new paint and blast booths replaced existing paint and blast facilities and did not increase the maximum number of parts that can be produced each year. The following conditions were included in the permit:

- (a) The PM emissions from the Paint Booth (identified as Unit 002) shall not exceed 0.21 pounds per hour. This limit is equivalent to 0.92 tons per year.
- (b) The PM emissions from the Blast Booth (identified as Unit 003) shall not exceed 0.13 pounds per hour. This limit is equivalent to 0.57 tons per year.

These limitations are equivalent to 1.5 tons per year. The source will comply with these limitations using dry filters on the paint booth and dust collectors on the blast booth.

326 IAC 2-4.1-1 (New Source Toxics Control)

Although constructed after the July 27, 1997 applicability date, this modification is not subject to the requirements of 326 IAC 2-4.1-1 because the potential to emit hazardous air pollutants is less than 10 tons per year for any single HAP and less than 25 tons per year for any combination of HAPs.

State Rule Applicability - Paint Booth

326 IAC 6-1-2 (Nonattainment Area Particulate Emission Limitations)

The paint booth is subject to 326 IAC 6-1-2(a) because this source is located in Lake County, has a potential to emit particulate matter greater than 100 tons per year, and has actual particulate emissions greater than 10 tons per year. The following requirement has been included in the permit:

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Emission Limitations for General Sources), the particulate matter emissions from the Paint Booth (identified as Unit 002) shall not exceed 0.03 grains per dry standard cubic foot.

Brandenburg uses dry filters to comply with this emission limitation.

326 IAC 6-1-10.1 (Lake County PM₁₀ Emission Requirements)

The paint booth is not subject to the requirements of this rule because it is not one of the listed emission units.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Although the potential emissions of VOC from the surface coating booth are 74 tons per year, the actual emissions from the booth are less than 15 pounds per day. Pursuant to 326 IAC 8-2-1(a)(4), facilities constructed after July 1, 1990 and that have actual emissions less than 15 pounds per day before add-on controls are not subject to the requirements of this rule. The actual emissions of VOC from the surface coating booth have been limited in this permit as previously described in 326 IAC 2-3 (Emission Offset). The following condition has been added to the permit:

Pursuant to 326 IAC 8-2-1(a)(4), the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) are not applicable to the Paint Booth (identified as Unit 002). If at any time the amount of VOC used in the Paint Booth exceeds fifteen (15) pounds per day, the Permittee shall notify the IDEM, OAQ of the change in operation and shall comply with the requirements of 326 IAC 8-2-9.

326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

Although constructed after the January 1, 1980 applicability date, the paint booth is not subject to the requirements of 326 IAC 8-1-6 because the booth would be subject to 326 IAC 8-2-9 if the actual emissions were greater than 15 pounds per day. Operations that are subject to the provisions of another Article 8 rule are not subject to the requirements of this rule.

State Rule Applicability - Blast Booth

326 IAC 6-1-2 (Nonattainment Area Particulate Emission Limitations)

The blast booth is subject to 326 IAC 6-1-2(a) because this source is located in Lake County, has a potential to emit particulate matter greater than 100 tons per year, and has actual particulate emissions greater than 10 tons per year. The following requirement has been included in the permit:

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Emission Limitations for General Sources), the particulate matter emissions from the Blast Booth (identified as Unit 003) shall not exceed 0.03 grains per dry standard cubic foot.

To comply with this emission limit, Brandenburg uses a dust collector with an outlet grain loading of less than 0.03 grain per dry standard cubic foot.

326 IAC 6-1-10.1 (Lake County PM₁₀ Emission Requirements)

The blast booth is not subject to the requirements of this rule because it is not one of the listed emission units.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous

compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to the new paint booth and blast booth.

Conclusion

The operation of this new paint booth and blast booth shall be subject to the conditions of the proposed Part 70 Significant Source Modification No. 089-16450-00176.

**Appendix A: Emissions Calculations
VOC and PM/PM10 Emissions
From Surface Coating Operations**

Page 1 of 3 TSD App A

**Company Name: Brandenburg Industrial Service Company
Address City IN Zip: One North Broadway TS 670, Gary, Indiana 46402
Significant Source Modification: 089-16450
Plt ID: 089-00176
Reviewer: ERG/AAB
Date: 7/24/2003**

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non- Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	VOC PTE pounds per hour	VOC PTE pounds per day	VOC PTE tons per year	PM/PM10 PTE (ton/yr)	Transfer Efficiency
Primer Coat															
DuPont 681-705	11.9	28.7%	0.0%	28.7%	0.0%	51.6%	10.0	0.33	3.40	3.40	11.22	269.3	49.1	67.3	45%
Thinner	6.3	100.0%	0.0%	100.0%	0.0%	0.0%	1.0	0.33	6.33	6.33	2.09	50.13	9.15	0.00	45%
Finish Coat															
Yellow 40P	9.1	37.4%	0.0%	37.4%	0.0%	51.6%	5.3	0.20	3.39	3.39	3.56	85.4	15.6	14.3	45%
Activator	9.4	9.50%	0.0%	9.5%	0.0%	87.0%	1.8	0.20	0.90	0.90	0.31	7.53	1.37	7.20	45%

PTE Before Controls

17.2 412 75.3 88.8

PTE After Controls

0.89

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

VOC PTE Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

PM/PM10 PTE Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Note: PTE Calculations based on worst case product consisting of metal 3-axle trailers.]

Note: PM/PM10 PTE is calculated using worst case transfer efficiency of 45%. Airless spray guns are used to apply the primer and air atomization spray guns are used to apply the finish coat. The actual transfer efficiencies for these guns may be as high as 50 to 75%.

Appendix A: Emission Calculations

HAP Emission Calculations

From Surface Coating Operations

Company Name: Brandenburg Industrial Service Company

Address City IN Zip: One North Broadway TS 670, Gary, Indiana

Significant Permit Modification: 089-16450

Plt ID: 089-00176

Permit Reviewer: ERG/AAB

Date: 7/24/2003

Material	Density (lb/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % MEK	Weight % EthylBenzene	Weight % 1,2,4-trimethyl Benzene	Weight % Aliphatic Diisocyanate
Primer Coat									
DuPont 681-705	11.9	10.0	0.33	3.00%	0.00%	0.00%	0.60%	0.00%	0.00%
Thinner	6.3	1.0	0.33	5.00%	16.00%	12.10%	1.70%	0.00%	0.00%
Finish Coat									
Yellow 40P	9.1	5.3	0.20	2.00%	0.00%	0.00%	0.40%	0.00%	0.00%
Activator	9.4	1.8	0.20	0.00%	0.00%	0.00%	0.00%	2.00%	0.20%

Total State Potential Emissions

METHODOLOGY

HAP PTE (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

[Note: Calculations based on worst case product consisting of metal 3-axle trailer.]

Appendix A: Emission Calculations

Page 3 of 3 TSD App A

PM/PM10 Emissions

From Blast Booth

Company Name: Brandenburg Industrial Service Company

Address: One North Broadway TS 670, Gary, Indiana 46402

Significant Permit Modification: 089-16450

Plt ID: 089-00176

Permit Reviewer: ERG/AAB

Date: 7/24/2003

Maximum Production Throughput = 2 Blast Guns x 240 sq.ft/hour/gun = 480 sq.ft/hour

Particulate Emissions From Work Piece:

Surface Material Removed = 0.025 lb/sq.ft
PM/PM10 from Removed Surface Material = 480 sq.ft/hour x 0.025 lb/sq.ft = 12 lbs/hour
52.6 tons/year

Particulate Emissions From Abrasive Breakdown:

Abrasive Type = Steel Grit
Breakdown Rate = 0.002%
Throw Capacity = 105.4 lb/min/nozzle = 6324 lb/hour/nozzle
Total Thrown (2 blast guns) = 210.8 lb/min 12648 lb/hour
PM/PM10 from Abrasive Breakdown = Total Thrown (lbs/hour) x 0.002% = 0.3 lbs/hour
1.11 tons/year

Total PM/PM10 Emissions = Emissions From Work Piece + Emissions from Abrasive Breakdown = 53.7 tons/year
(Before Controls)

Total PM/PM10 Emissions = Total PM/PM10 Emissions (tons/yr) x (1- Control Efficiency) = 0.54 tons/year
(After Controls)*

* - PM/PM10 emissions controlled by a baghouse with a 99% control efficiency.